

REMARKS

By this Amendment, claims 17-20 are added. Claims 1-20 are pending in this application. Support for these features may be found at least at page 4, line 2 - page 6, line 12 of the specification. No new matter is added. Reconsideration of the application is respectfully requested.

I. Rejections Under 35 U.S.C. §§102(e) and 103(a)

The Office Action rejects claims 1-6 and 8-13 under 35 U.S.C. §102(e) over U.S. Patent No. 6,909,805 to Ma et al. (Ma); and rejects claims 7 and 14-16 under 35 U.S.C. §103(a) over Ma in view of U.S. Patent No. 6,751,779 to Kurosawa et al. (Kurosawa). Applicants respectfully traverse the rejections.

Ma does not disclose, teach or suggest an apparatus and method for generating a summary of a document including "extracting portions of the document, the extracted portions being identified by the detected annotations, and generating a summary including only the extracted portions of the document, the summary being generated as a separate electronic image document that is different from the original image," as recited in independent claims 1 and 8.

The Office Action asserts that Ma teaches saving extracted handwritten annotations into memory. See col. 7, lines 52-61, and Figs. 7 and 8. Further, the Office Action appears to assert that saving the extracted handwritten annotations corresponds to generating a summary of a document by extracting portions of the image document identified by the detected annotations in which: the summary includes only the extracted portions of the document and the summary is generated as a separate electronic document that is different form the original image. See Office Action page 3, lines 7-11. Applicants respectfully disagree that saving the extracted portions annotations corresponds to generating a summary of the document.

Ma teaches, in Figs. 1 and 2, a method 10 for detecting and separating add-on handwritten annotations from a scanned document image 50 including printed text lines 52 and handwritten annotations 54. See col. 3, lines 39-42, and col. 4, lines 12-18. As shown in steps 24 and 26 of Fig. 1, Ma also teaches detecting and separating the printed text lines 52 from the handwritten annotations 54 by eliminating the printed text lines 52 from the scanned document image 50. See col. 3, line 67 - col. 4, line 5. Although Ma teaches detecting the printed text lines 52 and detecting the actual handwritten annotations 54, Ma does not teach or suggest detecting portions (of the scanned document image 50) that are identified by the actual detected handwritten annotations 54.

Ma also teaches separating the detected handwritten annotations 54 from the scanned document image 50 in step 28 of Fig. 1. Ma teaches, in Figs. 7 and 8, that the handwritten annotations 54, left/remaining in the scanned document image 50, are replaced by line merge bounding boxes 85. See col. 7, lines 52-57. Further, Ma teaches that the separated printed text lines 52 and the separated handwritten annotations 54 are extracted from the scanned document image 50 and may be discarded or saved into a memory for future use. See col. 7, lines 57-61. Although Ma teaches separating/removing the printed text lines 52 and the handwritten annotations 54 from the scanned document image 50, Ma does not teach or suggest generating an electronic summary document that is separate from the scanned document image 50.

In the apparatus and method of generating a summary of claims 1 and 8, extracted portions of an original electronic image document may be image maps of the original electronic image document and may be tagged with a pointer or address indicating the place in the originally scanned image from which it is extracted. See page 5, lines 4-9 of the specification. Because the extracted portions, e.g., the portions identified by the annotations,

may be compiled in a subsequently output summary, the summary includes only the extracted regions of interest indicated by the annotations in the original document See page 4, lines 2-6, page 5, lines 21-26 and page 6, lines 11-12 of the specification.

Because Ma does not teach or suggest generating a separate electronic document or detecting scanned document image portions identified by the actual detected handwritten annotations 54, Ma cannot reasonably be considered to teach or suggest the apparatus and method respectively recited in claims 1 and 8.

Kurosawa does not remedy the deficiencies of Ma discussed above. Kurosawa teaches providing editing marks and editing an input image after the input image is scanned by a scanner. See Fig. 1, and col. 4, lines 4-7. For example, Kurosawa teaches inserting or deleting character images, e.g. letters, from the image document. See Figs. 6A-8C, and col. 6, lines 40-67. However, Kurosawa does not teach or suggest generating a separate electronic image document that includes only extracted portion identified by annotations. Further, Kurosawa does not teach or suggest providing a summary in expandable detail levels, as set forth in claims 15 and 16.

The Office Action acknowledges that Ma does not teach or suggest providing a summary in expandable detail levels, as set forth in claims 15 and 16. However, the Office Action asserts that Kurosawa teaches expandable detail levels by inserting a series of characters into document lines located in a document. Applicants respectfully disagree that inserting characters into document lines constitutes a teaching of expandable detail levels.

The present application discloses, in Fig. 5, a plurality of layered detail levels 58, 60, 62, 64, 66 in a window 57 for a summary. See page 6, lines 13-17. By clicking on any one of the detail levels 58, 60, 62, 64, 66, a summary is generated for extracted portions (of the original scanned document) that are identified by detected annotations and that correspond to

the particular detail level. Therefore, each expandable detail level 58, 60, 62, 64, 66 generates a revised summary of the portions identified by the annotations. Kurosawa does not teach or suggest such features.

For at least the reasons discussed above, claims 1 and 8 are patentable over Ma and Kurosawa, alone or in permissible combination. Claims 2-7 and 9-16 variously depend from claims 1 and 8, and thus also are patentable for at least the reasons set forth above, as well as for the additional features they recite. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-16 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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